

## Bacterial pigment prodigiosin and its genotoxic effect

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### Abstract

A pigment complex has been isolated from the biomass of bacteria *Serratia marcescens* ATCC 9986 and separated into single fractions by chromatography. An analysis of the fractions by spectrophotometry, thin layer chromatography, NMR spectroscopy and mass spectrometry enabled us to isolate the so-called red fraction, to confirm the identity of the product of the red fraction to the pigment prodigiosin, and to prove its purity. Some features of the toxic action of prodigiosin have been revealed. It has been found for the first time that the pigment is capable of inducing mutations in *Salmonella typhimurium* TA 100 cells (Ames test) and chromosomal damage in mammalian erythroblasts. © 2013 Pleiades Publishing, Ltd.

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### Keywords

prodigiosin, *Serratia marcescens* ATCC 9986, toxic and genotoxic effects